

Testing the Waters: Connecticut

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Ranked 26th in Beachwater Quality (out of 30 states)
 11% of samples exceeded national standards for designated beach areas in 2011

In order to protect beachgoers from waterborne illnesses, we need strong policies to identify unsafe beach water quality and to clean up the major sources of beach pollution. EPA is revising the safety standards that are designed to protect swimmers from getting sick, but the agency needs to strengthen its proposed standards, which—based on EPA's estimates of illness risks—would make it acceptable for 1 in 28 swimmers to become ill. In addition, because polluted runoff is the biggest known source of pollution that causes swimming advisories or beach closings, EPA needs to reform the national requirements that govern sources of polluted stormwater, and the states and EPA need to rigorously enforce existing requirements to ensure that runoff is controlled using innovative solutions known as green infrastructure that enable communities to naturally absorb or use runoff before it causes problems.

Demand Safer Beaches

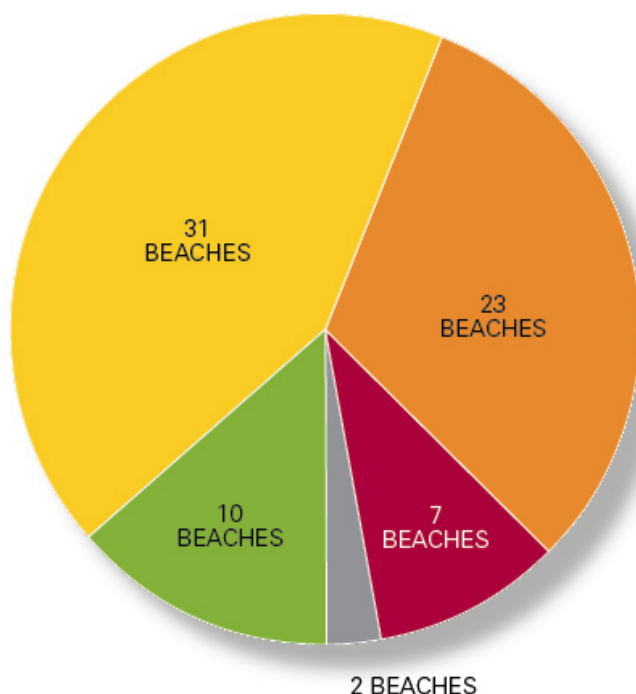
Ask the EPA to issue health-based water quality criteria

TAKE ACTION

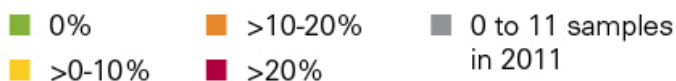


Key Findings in Connecticut

Connecticut 2011 Beachwater Quality Summary



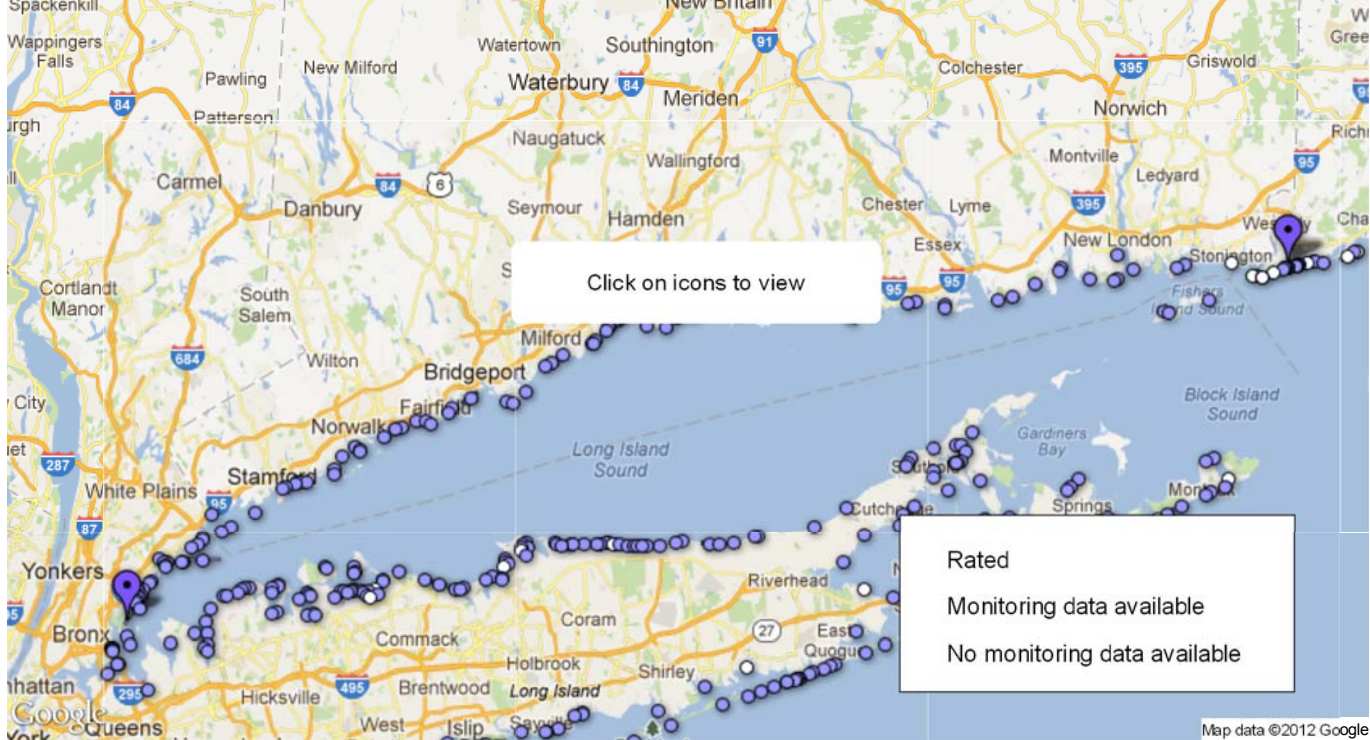
Percent of samples exceeding state standards:



Reported Sources of Beachwater Contamination
 (number of closing/advisory days; includes reported sources of

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BETA VERSION: Beach location information is based on the best-available EPA datasets ([learn about our beach location methodology](#)). Please feel free to [suggest a correction or provide feedback](#).

Connecticut has 73 public beaches stretching along 15 miles of Long Island Sound coastline. The Connecticut Department of Public Health (CT DPH) administers the state's BEACH Act grant.

Hurricane Irene and Beach Closures

There was a marked increase in the number of beach closure events in 2011 in Connecticut, largely due to debris hazards created by a rare late-summer hurricane (Hurricane Irene). Rain from the hurricane also caused high fecal indicator bacteria counts, particularly at the eastern end of Long Island Sound, where both the Connecticut and Thames rivers drain. Heavy rains in mid-August also impacted beachwater quality at the eastern end of the Sound.¹

What Does Beachwater Monitoring Show?

After reviewing historical data on bacterial densities, Ledge Light Health District permanently removed Kiddie's Beach in New London County from service in early 2011 and posted it with "No Swimming" signs. This beach will continue to be out of service until further notice. West Haven East Beach and West Haven West Beach in New Haven County were converted to nine smaller beach locations (Altschuler, Dawson, Morse, Oak Street A, Oak Street B, Rock Street, Seabluff, Seaview, and South Street) in 2011.

In 2011, Connecticut reported 73 beaches. Of these, 72 (99%) were assigned a monitoring frequency of once a week, and 1 (1%) was not monitored. In 2011, 11% of all reported beach monitoring samples exceeded the state's daily maximum bacterial standard of 104 colonies/100 ml. The beaches with the highest percent exceedance rates of the state standard in 2011 were Green Harbor Beach in New London County (52%), Seabluff Beach in New Haven County (30%), Town Beach (Clinton) in Middlesex County (28%), Short Beach in Fairfield County (27%), Esker Point Beach in New London County (25%), Branford Point Beach (25%) and Clark Avenue Beach (22%) in New Haven County, and White Sands Beach in New London County (20%).

Beaches in New Haven County had the highest exceedance rate of the state standard in 2011 (11%), followed by New London (11%), Fairfield (10%), and Middlesex (8%) counties. NRDC considers all reported samples individually (without averaging) when calculating the percent exceedance rates in this analysis. This includes duplicate samples and samples taken outside the official beach season, if any.

Key Resources

- [Plan of Action: How to Clean Up America's Beaches](#)
- [10 Simple Things Individuals Can Do](#)
- [Frequently Asked Questions](#)
- [State-by-State Results: Understanding the State Summaries and Methodologies](#)
- [Methodology for Beach Locations](#)
- View by state:

Related Factsheets

- [Highlights of the State Reports](#)
- [Sources of Beachwater Pollution](#)
- [The Impacts of Beach Pollution](#)
- Previous Years of Testing the Waters ([2011](#), [2010](#), [2009](#))

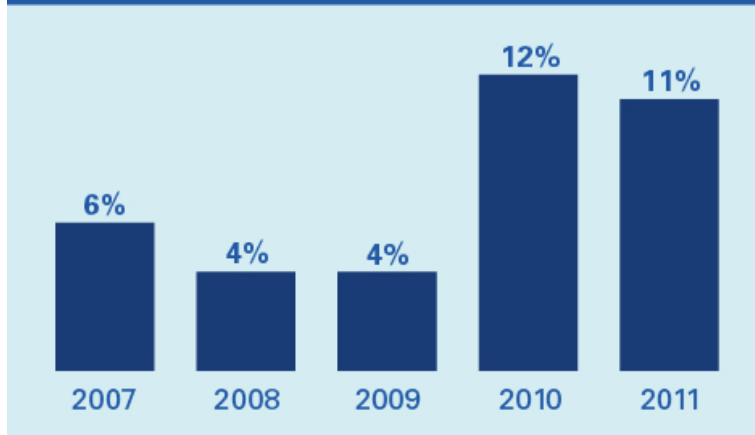
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NRDC's staff blog

[Aspiring to be second \(or third\) best?](#)
posted by Karen Hobbs, 3/21/12
There are competing theories as to where Chicago's "Second City" nickname originated. ...

[New York City Commits to Green Solution for Sewage Overflows, Harnessing Water as a Resource to Improve Communities](#)

Connecticut Percent of Samples Exceeding the State's Daily Maximum Bacterial Standard for 46 Beaches Reported 2007-2011



What Are Connecticut's Sampling Practices?

Connecticut's monitoring season stretches from Memorial Day to Labor Day.

Monitoring at municipal coastal beaches is the responsibility of local health authorities. At state park beaches, the Connecticut Department of Energy and Environmental Protection (CT DEEP) is responsible. Both local and state personnel follow state guidelines that samples be taken 12 to 18 inches below the surface in water that is 3 to 4 feet deep.¹ Beaches are assigned to tiers at the end of every bathing season. These tier assignments are not related to the extent of beach use or potential for beachwater contamination, but are instead assigned on the basis of the sampling frequency reported by local health departments and CT DEEP and the number of beach closing events.¹ Beaches that were sampled weekly and had no more than one closure event during the previous swim season are assigned Tier 1 status, beaches that were sampled weekly and had two or three closure events during the previous swim season are assigned Tier 2 status, and beaches that were not sampled weekly or that had more than three closure events during the previous swim season are assigned Tier 3 status.¹ Sampling frequency and the number of monitoring station locations at a beach are not assigned on the basis of beach tier.¹

State guidelines suggest additional sampling when there are higher bather loads, at culverts and drainage pipes after rain events, after sewage spills or other pollution events, if waterfowl are congregating, or if sanitary survey information indicates a potential for non-point contamination after a rain event.¹ Resamples are recommended by the state when a sample exceeds standards.³ At the four state park marine beaches monitored by CT DEEP, resampling is done every day once a beach is closed until recreational water quality becomes acceptable.² States that monitor more frequently after an exceedance is found or after heavy rain will tend to have higher percent exceedance rates and lower total closing/advisory days than they would if their sampling schedule did not increase after an exceedance was found or after a heavy rainfall.

How Many Beach Closings and Advisories Were Issued in 2011?

Total closing/advisory days for 167 events lasting six consecutive weeks or less increased nearly fourfold, from 143 days in 2010 to 538 days in 2011. The increase was largely due to heavy rainfall, including the rains of Hurricane Irene. For prior years, there were 108 days in 2009, 135 days in 2008, 108 days in 2007, 224 days in 2006, and 200 days in 2005. In addition, there were no extended events and 1 permanent event (98 days) in 2011. Extended events are those in effect more than six weeks but not more than 13 consecutive weeks; permanent events are in effect for more than 13 consecutive weeks.

For the 167 events lasting six consecutive weeks or less, 26% (139) of closing/advisory days were due to monitoring that revealed elevated bacteria levels; 21% (115) were preemptive due to other reasons, predominantly associated with Hurricane Irene; 49% (261) were preemptive due to heavy rainfall other than Hurricane Irene; and 4% (23) were preemptive due to reports of swimmer's itch.

How Does Connecticut Determine When to Warn Visitors

posted by Peter Lehner, 3/15/12

With a landmark announcement this week, New York City has officially joined a growing number of cities ...

Science in action: What do you do when you learn something new? Don't look to EPA's new beach pollution standards for a good example posted by Tina Swanson, 3/4/12
Science is an emergent process. Now, before your eyes glaze over with this wonky jargon, this ...

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Local jurisdictions determine how they will apply water quality standards. State guidelines encourage local health departments and CT DEEP to apply the EPA's single-sample maximum standard for marine and estuarine designated beach areas (104 cfu/100 ml) when considering whether to close a beach or issue an advisory. The state guidelines also encourage local health departments and CT DEEP to consider the geometric mean of the last five samples collected in a 30-day period. If this geometric mean is greater than 35 cfu/100 ml, then the state's guideline is to consider closing the beach. CT DPH encourages beach managers to take into consideration the range or spread of the sample values that generate geometric mean results greater than 35 cfu/100 ml.⁴ Some local health departments use either the single-sample maximum or the geometric mean to trigger closing and advisory decisions; for other local health departments and CT DEEP, the single-sample maximum triggers advisory and closing decisions, and exceedance of the geometric mean standard may trigger consideration of closings and advisories.²

When routine samples exceed the state standards, the state recommends that a resample be taken and a sanitary survey be conducted to determine if raw or partially treated sewage is contributing to the elevated bacterial concentrations. If the survey reveals discharges of raw or partially treated sewage, then the state recommends that the bathing area be closed. If sample results exceed the standards and a sanitary survey reveals no evidence of sewage contamination, the state recommends that the bathing area be examined on an individual basis with consultation from CT DPH before any decision about closure is made. A beach whose samples exceed the standards may remain open if a sanitary survey reveals no sign of a sewage spill.¹ Local authorities may adopt standards more protective of public health than the state standards and may issue advisories in addition to closures. Most municipalities resample before issuing an advisory, and most municipalities also conduct a sanitary survey to determine if sewage is contributing to the elevated bacterial concentrations. Some municipalities collect multiple samples at each monitoring event, and in some cases, if more than one sample exceeds the standard, they will close the beach without resample.²

Local jurisdictions are also responsible for determining their own preemptive closing and advisory practices. State guidance allows preemptive beach closings based on rainfall data,¹ and many municipalities have adopted a preemptive rainfall threshold for selected beaches. When preemptive rainfall thresholds are reached at these beaches, the beaches are automatically closed until test results indicate that there is no bacterial violation.² State guidance says that local jurisdictions may recommend preemptive closures if there is a known waste contamination event such as a sewage bypass, mechanical failure at a sewage treatment plant, or a sewer line break.¹ If a beach is impacted by floating debris, the beach can be closed for safety reasons.¹ In addition, local health departments may post an advisory or closure that responds to local conditions and to protect public health. Local health departments may also post an advisory at a beach or close it if there is a harmful algal bloom.² In late 2009, the state issued a framework document that includes recommendations about managing beach hazards for local health departments.¹

Shoreline municipalities are sensitive to reports of swimmer's itch. Swimmer's itch, also called cercarial dermatitis, appears as a skin rash caused by an allergic reaction to certain parasites that infect some birds and mammals. These microscopic parasites are released from infected snails into fresh and salt water. While the parasites' preferred host is nonhuman, if the parasite comes into contact with a swimmer, it burrows into the skin and dies, causing an allergic reaction and rash. Swimmer's itch is found throughout the world and is more frequent during summer months. Connecticut beaches can be placed under advisory when swimmer's itch is reported.²

Connecticut 2011 Monitoring Results and Notice and Advisory Days⁵

County	Beach	Tier	Assigned Monitoring Frequency	Total Samples	% of samples exceeding state standards	Closing or Advisory days	View
Fairfield	Bell Island Beach	2	once a week	28	7%	6	view
Fairfield	Burying Hill Beach	2	once a week	13	8%	5	view

County	Beach	Tier	Assigned Monitoring Frequency	Total Samples	% of samples exceeding state standards	Closing or Advisory days	View
Fairfield	Byram Beach	3	once a week	53	15%	14	view
Fairfield	Calf Pasture Beach	2	once a week	45	7%	6	view
Fairfield	Compo Beach	2	once a week	54	15%	5	view
Fairfield	Cummings Beach	3	once a week	49	6%	10	view
Fairfield	East (Cove Island) Beach	3	once a week	47	2%	10	view
Fairfield	Great Captain's Island Beach	2	once a week	28	7%	7	view
Fairfield	Greenwich Point Beach	3	once a week	45	0%	7	view
Fairfield	Hickory Bluff Beach	2	once a week	15	7%	6	view
Fairfield	Island Beach	2	once a week	31	10%	7	view
Fairfield	Jennings Beach	3	once a week	35	9%	11	view
Fairfield	Long Beach (Marnick's)	2	once a week	15	13%	7	view
Fairfield	Long Beach (Proper)	2	once a week	30	13%	5	view
Fairfield	Marvin Beach	2	once a week	17	18%	6	view
Fairfield	Pear Tree Point Beach	3	once a week	69	13%	9	view
Fairfield	Penfield Beach	3	once a week	35	9%	11	view
Fairfield	Quigley Beach	3	once a week	16	6%	10	view
Fairfield	Rowayton Beach	2	once a week	15	7%	6	view
Fairfield	Sasco Beach	3	once a week	34	6%	11	view
Fairfield	Seaside Park Beach	1	once a week	65	6%	0	view
Fairfield	Shady Beach	3	once a week	68	19%	8	view
Fairfield	Sherwood Island State Park Beach	1	once a week	45	4%	1	view
Fairfield	Short Beach	2	once a week	48	27%	7	view
Fairfield	South Pine Creek Beach	3	once a week	17	12%	11	view
Fairfield	Southport Beach	3	once a week	36	14%	11	view
Fairfield	Weed Beach	3	once a week	45	13%	9	view
Fairfield	West Beach	3	once a week	50	8%	10	view
Middlesex	Harvey's Beach	1	once a week	14	0%	10	view

County	Beach	Tier	Assigned Monitoring Frequency	Total Samples	% of samples exceeding state standards	Closing or Advisory days	View
Middlesex	Middle Beach/Stannard Beach	1	once a week	8	0%	7	view
Middlesex	Town Beach (Clinton)	3	once a week	18	28%	22	view
Middlesex	Town Beach (Old Saybrook)	1	once a week	15	0%	10	view
Middlesex	Westbrook Town Beach/West Beach	1	once a week	25	4%	30	view
New Haven	Altschuler Beach	2	once a week	28	14%	5	view
New Haven	Anchor Beach (Merwin Point) #1	2	once a week	14	7%	15	view
New Haven	Anchor Beach (Merwin Point) #2	2	once a week	15	7%	15	view
New Haven	Branford Point Beach	1	once a week	20	25%	6	view
New Haven	Clark Avenue Beach	1	once a week	23	22%	0	view
New Haven	Dawson Beach	2	once a week	29	14%	4	view
New Haven	East Haven Town Beach	1	once a week	29	14%	0	view
New Haven	East Wharf Beach	1	once a week	15	0%	0	view
New Haven	Fort Hale Park Beach	1	once a week	91	13%	0 (98)	view
New Haven	Gulf Beach	2	once a week	13	8%	15	view
New Haven	Hammonasset Beach State Park Beach	1	once a week	75	0%	0	view
New Haven	Jacobs Beach (Town Beach)	1	once a week	38	18%	2	view
New Haven	Lighthouse Point Beach	3	once a week	152	11%	14	view
New Haven	Morse Beach	2	once a week	25	8%	4	view
New Haven	Oak Street A Beach	2	once a week	27	15%	5	view
New Haven	Oak Street B Beach	2	once a week	28	11%	4	view
New Haven	Pent Road Beach	1	once a week	16	0%	0	view
New Haven	Rock Street Beach	2	once a week	29	10%	3	view
New Haven	Seabluff Beach	2	once a week	30	30%	2	view
New Haven	Seaview Beach	2	once a week	29	17%	4	view
New Haven	Silver Sands State Park Beach	1	once a week	68	10%	1	view
New Haven	South Street Beach	2	once a week	30	13%	4	view

County	Beach	Tier	Assigned Monitoring Frequency	Total Samples	% of samples exceeding state standards	Closing or Advisory days	View
New Haven	Stony Creek Beach	1	once a week	13	8%	0	view
New Haven	Surf Club Beach	1	once a week	30	0%	0	view
New Haven	Walnut Beach	2	once a week	28	11%	15	view
New Haven	West Wharf Beach	1	once a week	15	7%	0	view
New Haven	Woodmont Beach	2	once a week	14	7%	15	view
New London	Dubois Beach	3	none	0	n/a	0	view
New London	Eastern Point Beach	1	once a week	14	7%	5	view
New London	Esker Point Beach	1	once a week	16	25%	9	view
New London	Green Harbor Beach	1	once a week	21	52%	36	view
New London	Hole-In-the-Wall Beach	1	once a week	17	6%	6	view
New London	Mccook Point Beach	1	once a week	16	6%	6	view
New London	Noank Dock	1	once a week	14	0%	6	view
New London	Ocean Beach Park	1	once a week	31	10%	9	view
New London	Pleasure Beach	1	once a week	14	0%	6	view
New London	Rocky Neck State Park Beach	2	once a week	83	4%	5	view
New London	Soundview Beach	1	once a week	15	13%	8	view
New London	Waterford Town Beach	1	once a week	14	0%	6	view
New London	White Sands Beach	1	once a week	15	20%	8	view

Notes

1. Connecticut Department of Public Health, "Connecticut's 2011 Annual Report for the U.S. EPA Beach Grant with Summary Data for 2003-2011," February 2, 2012.
2. Jon Dinneen, Connecticut Department of Public Health, personal communication, February 2012.
3. Connecticut Department of Public Health and Connecticut Department of Energy and Environmental Protection, "Quality Assurance Project Plan for the Beach Monitoring and Notification Program for Connecticut Coastal Beaches," August 2011.
4. Connecticut's understanding is that the national geometric mean standard is based on epidemiology studies showing that an exceedance of a geometric mean of 35 cfu/100 ml with a log standard deviation of less than 0.7 may result in unacceptable illness rates. Log standard deviations become smaller as sampling results become more uniform. Log standard deviations for beachwater quality data range from zero (where all samples have the same number of bacteria) to about 1.3 (where half of samples have the lowest possible bacteria count while the other half have the highest possible bacteria count).
5. Reported closing or advisory days are for events lasting six consecutive weeks or less. Days in parentheses are for events lasting more than six consecutive weeks.